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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER	
LEE, J	
ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 10/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/441,341

Applicant(s)

Schafeld et al.

Examiner

John R. Lee

Group Art Unit

2878

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 54-99 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 54-99 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 2878

DETAILED ACTION

Interference

Claims 54-99 of this application has been copied by the applicant from U. S. Patent No. 5,837,994. These claims are not patentable to the applicant because each of these claims are rejected under 35 U.S.C. 112, first paragraph, as discussed below.

An interference cannot be initiated since a prerequisite for interference under 37 CFR 1.606 is that the claim be patentable to the applicant subject to a judgement in the interference.

Reexamination of U.S. Patent No. 5,837,994

Claims 1-53 of U. S. Patent No. 5,837,994 have been reexamined; please see the attached reexamination certificate. As shown therein, claims 1, 7, 14, 15, 30, and 44 were amended as a result of the reexamination. While claim 99 of the present application is an exact copy of a claim from U. S. Patent No. 5,837,994, claims 54-98 of the present application are no longer exact copies of claims from U. S. Patent No. 5,837,994. The above-mentioned amended claims of the patent contain limitations not covered by claims 54-98 of the present application.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to

Art Unit: 2878

make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 54-99 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 54, there is no support or written description for the limitation "as a function of the relative output of pixels imaging the same band of light." On pages 10 and 11 of the specification, it is only mentioned that the intensities of the pixels are compared to a threshold. No mention is made of comparing the output of pixels in the same spectral band with each other. Claims 55-67 are dependent upon claim 54 and are thus rejected for the same reasons as claim 54.

Regarding claim 68, in addition to the limitations of claim 54 mentioned above, there is no support or written description for the limitation of "two or more lenses ...configured to image ... onto different portions of said image array sensor." Instead applicant's disclosure only describes, as applicant's figure 6 shows, two lenses imaging onto two separate image array sensors.

Claims 69-71 are dependent upon both claims 54 and 68 and are thus rejected for the same reasons as claims 54 and 68.

Regarding claims 72 and 74, in addition to those limitations present in claims 54 and 68 as discussed above, there is no support or written description of "comparing...with the average..."; the only comparing described by the applicant is with a "threshold."

Art Unit: 2878

Claims 73 and 75-83 are dependent upon both claims 54 and 68 and are thus rejected for the same reasons as claims 54 and 68.

Claims 84-88 are dependent upon claim 54 and are thus rejected for the same reasons as claim 54.

Regarding claim 89, there is no support or written description for (a) the limitation of “two or more lenses ...configured to image ... onto two or more corresponding portions” of the image array sensor (instead applicant’s disclosure only describes, as applicant’s figure 6 shows, two lenses imaging onto two separate image array sensors) and (b) the limitation of “...as a function of the relative output of pixels imaging” the external sources of light” (on pages 10 and 11 of the specification, it is only mentioned that the intensities of the pixels are compared to a threshold; no mention is made of comparing the outputs of the pixels with each other).

Claims 90-93 are dependent upon claim 89 and are thus rejected for the same reasons as claim 89.

Regarding claim 94, there is no support or written description for the limitation “said optical system configured to image light within each predetermined spectral band onto different predetermined blocks within said image sensor.” As discussed above with respect to claim 68, the specification only describes using two separate image array sensors, not different blocks within the same sensor. Furthermore, there is no support or written description of the limitation “as a function of the output of one or more pixels within each ... block, relative to the output of other

Art Unit: 2878

pixels within the same block.” The specification only describes comparison to a threshold. No mention is made of comparing the output of pixels with each other.

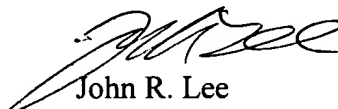
Claims 95-98 are dependent upon claim 94 and are thus rejected for the same reasons as claim 94. Claim 96, and its dependent claim 97, further comprises the limitation, similar to that in claim 68 discussed above, of two lenses for imaging onto different blocks within the same sensor. As discussed above with respect to claim 68, there is no support for this limitation.

Regarding claim 99, there is no support or written description for the limitation of “configured to not image light in the infrared region of the spectrum emitted by said light sources, thereby increasing the distinction between said red-emitting sources and white-emitting sources.” While the specification mentions providing various color filters such as red and blue, there is no support for filtering infrared light or that providing infrared filters in addition to the color filters will increase the distinction between red and white light sources. In fact, the description on page 10 and figure 8c suggest intentionally imaging light in the IR range.

Art Unit: 2878

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Lee whose telephone number is (703) 308-4116. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm. The fax phone number for this Group is (703) 308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.


John R. Lee
Primary Examiner
Art Unit 2878

jrl
10/18/01